



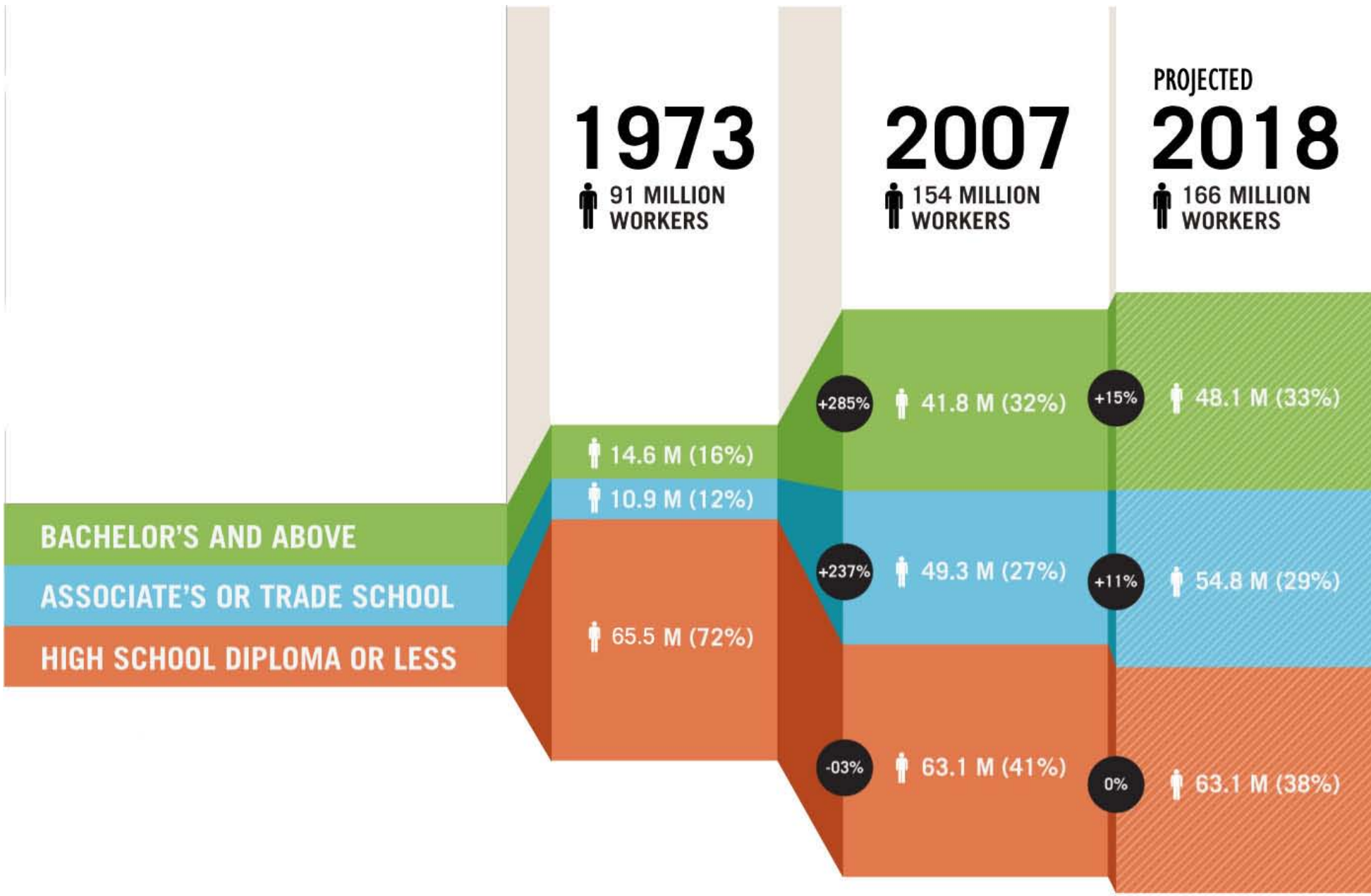
Solving America's Innovation Problem

The Naval STEM Forum

June 15, 2011

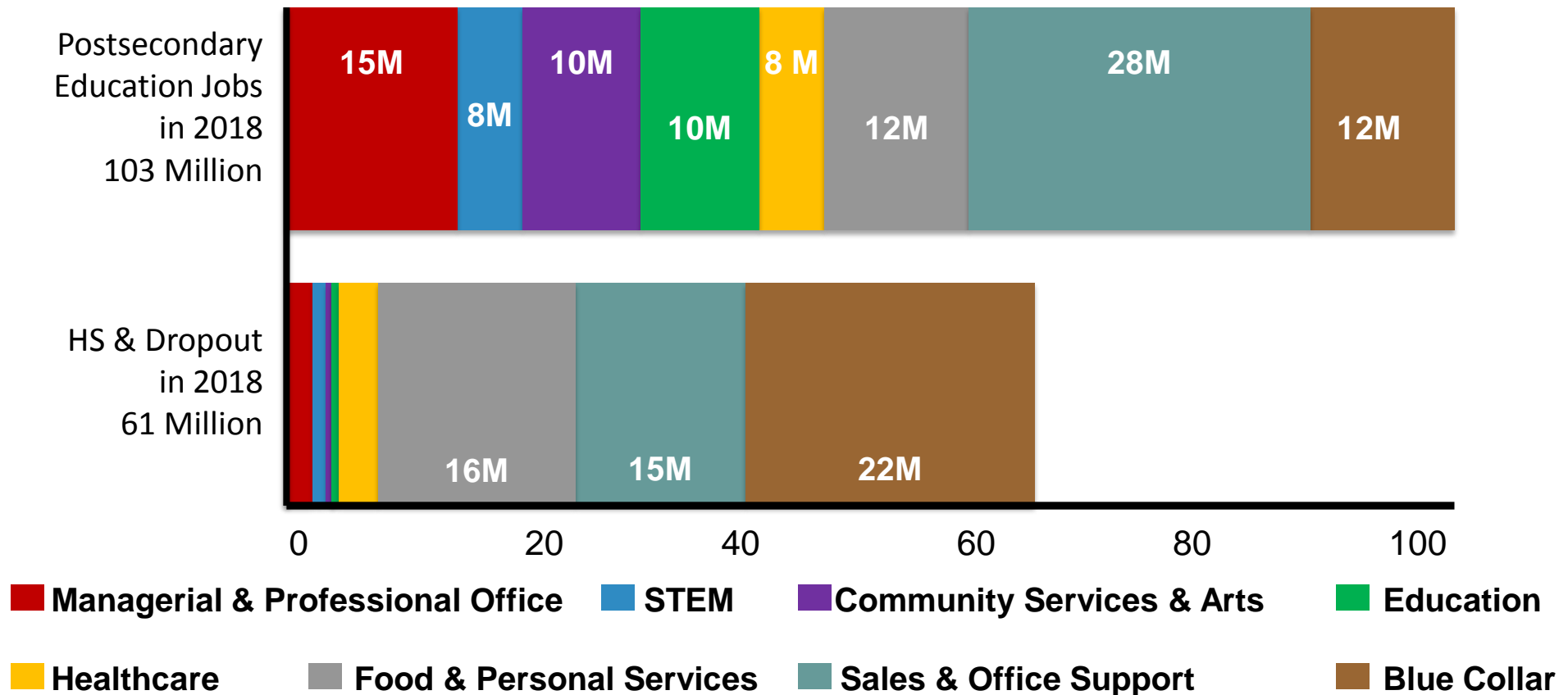
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Educating the Workforce of the Future

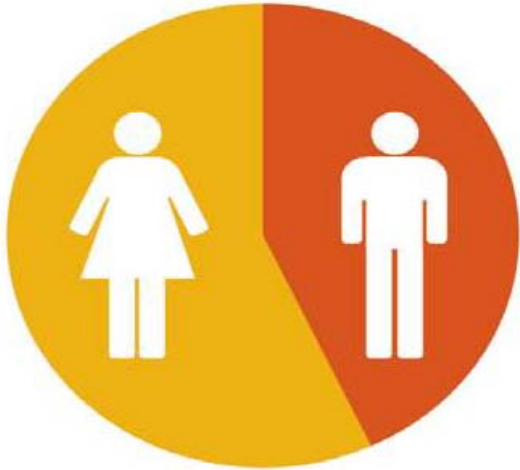


Education by Job Sector

Postsecondary education provides access to occupations across the economy, while workers with a high school diploma or less are largely limited to three occupational clusters that are either declining or pay low wages.



Gender Gap in US Colleges



Women account for 57%
of college students



Women earn 57% of college
degrees; men 43%



Women account for 60% of graduate students

College Majors and Gender

Men dominate bachelor's degrees in some fields (2007)

- 81% in engineering
- 81% in computer science
- 79% in physics

Women are stronger in other fields (2007)

- 77% in psychology
- 60% in biological sciences
- 50% in agricultural sciences
- 50% in chemistry

Women comprise almost half of the US workforce but only 27% of the science and engineering workforce

What Talent Wants

Lifelong
Learning
Opportunities

Virtual
Mobility

Positive
Country
Brand

High Level of
Freedom of
Mind

Inspiring
Working
Environment

Skill
Recognition
Institutions

The “Perfect
Employer Inc.”

Accessible
Talent Borders

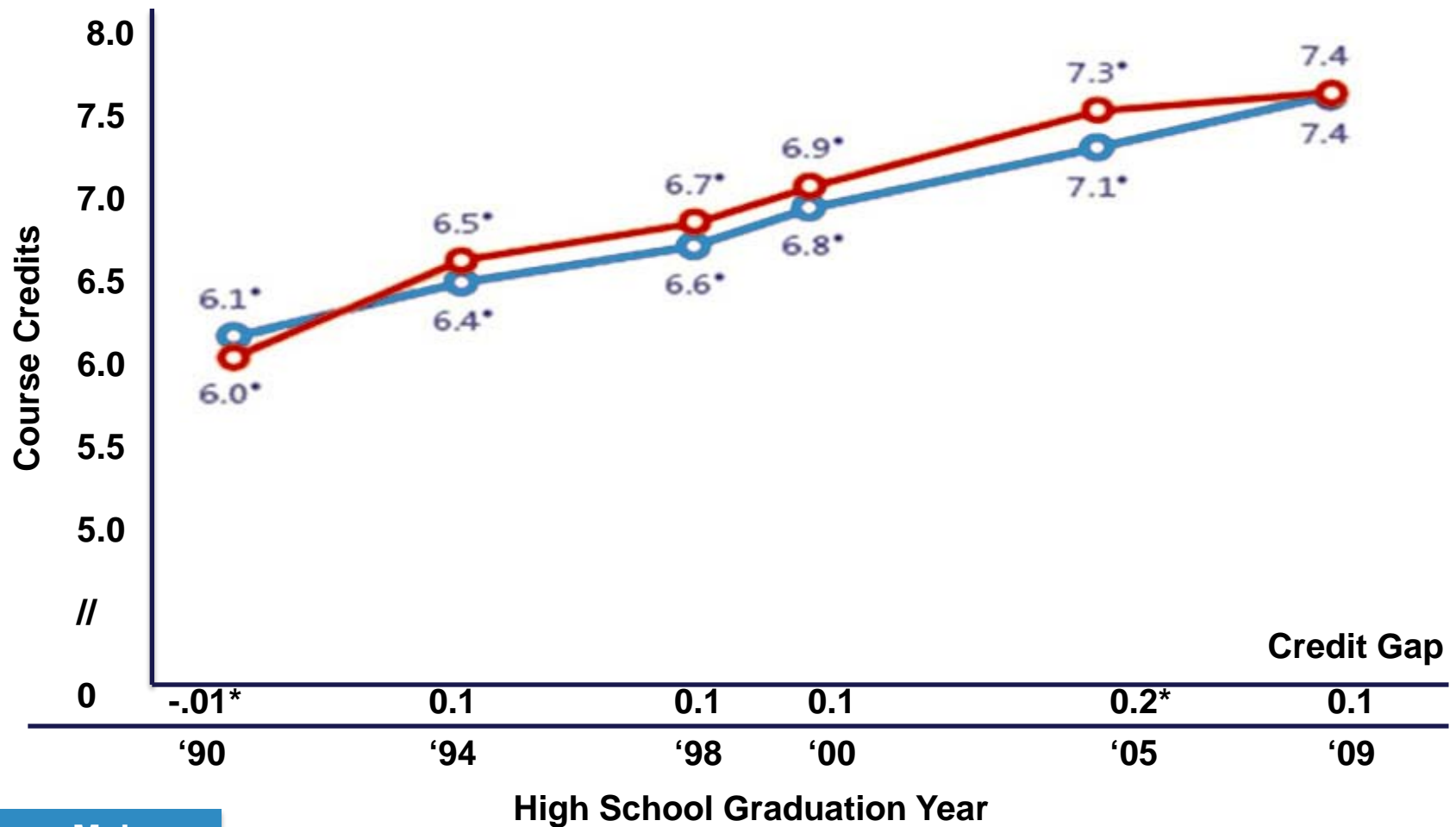
Diversity



{ **CHANGE THE**
EQUATION }

Average Math & Science Credits by Gender

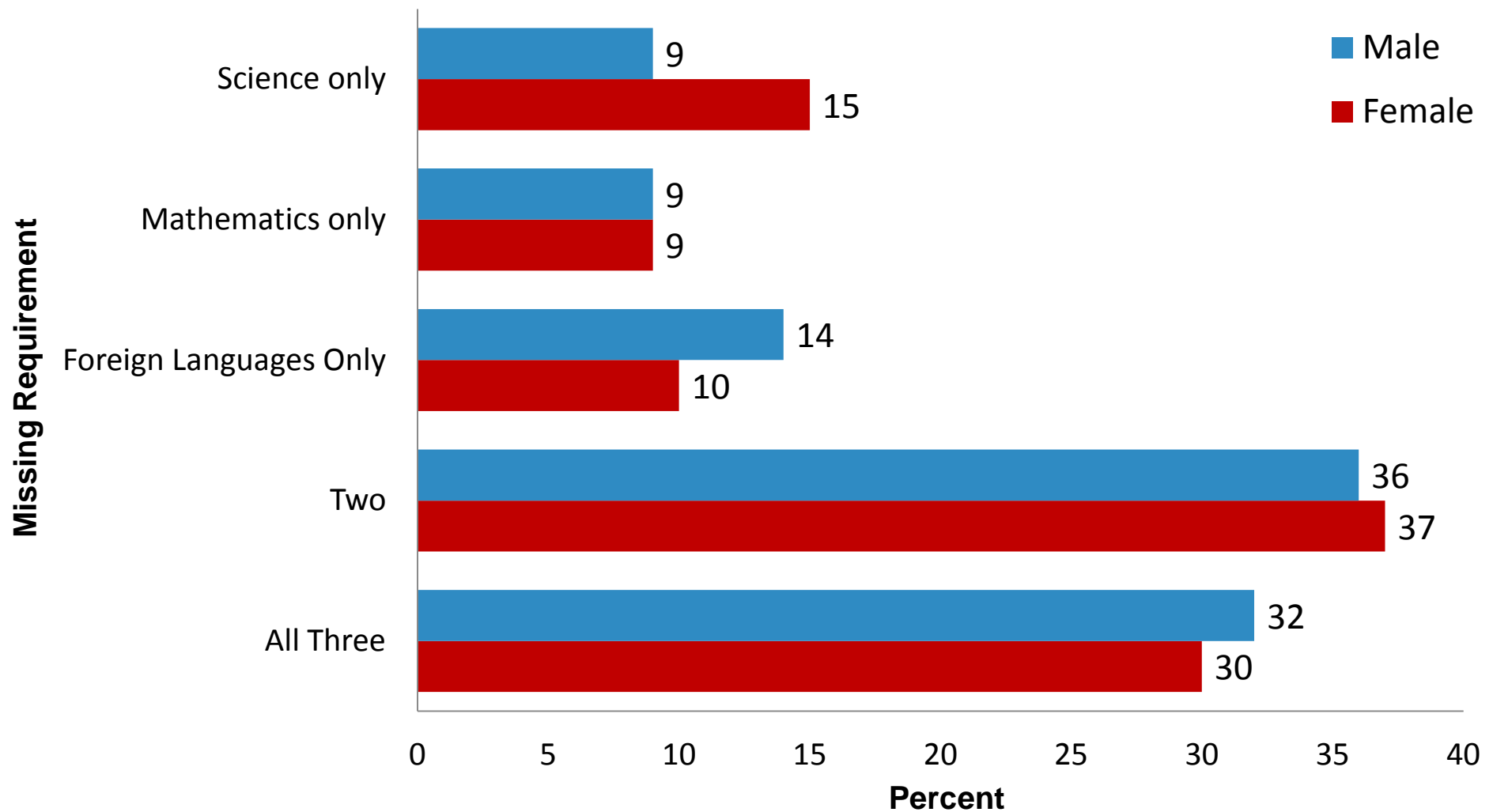
1999-2009



Male

Female

Not Ready for Rigorous Curriculum: 2009



Educate to Innovate

- Improve participation and performance of America's students in STEM
- Mobilize the business community to improve the quality of STEM learning in the US

Craig Barrett

Former CEO/Chair, Intel

Glenn Britt

CEO, Time Warner Cable

Ursula Burns

CEO, Xerox

William Green

Chairman, Accenture

Antonio Perez

CEO, Kodak

Sally Ride

CEO, Sally Ride Science

Rex Tillerson

CEO, Exxon Mobil

Organizational Characteristics

- Focus on preK-12 STEM learning
- Peer-to-peer network of CEOs
- Pledge to serve as the nation's conscience on progress in STEM learning
- Involve the White House, State Houses nationwide, foundations, the corporate community, school districts, IHEs, and out-of-school providers

Organizational Goals

- Improving STEM teaching at all grade levels, with a larger & more diverse cadre of highly-capable and inspirational STEM teachers
- Inspiring student appreciation & excitement for STEM programs & careers to increase success & achievement in school & opportunities for a collegiate education, especially among females & students of color
- Achieving a sustained commitment to improving STEM education from business leaders, government officials, STEM educators & other stakeholders through innovation, communication, collaboration & data-based decision making

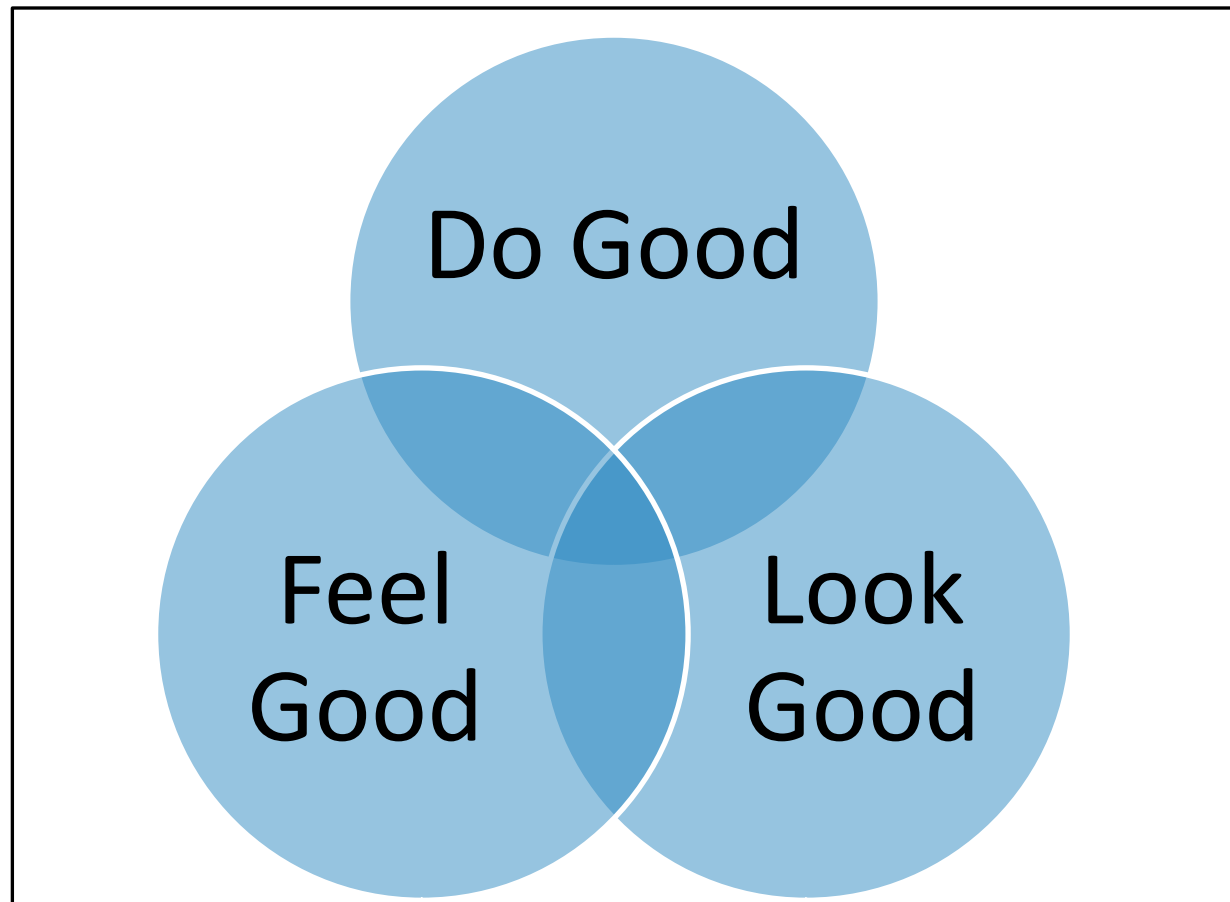
What defines Success?

- Corporate members strengthen philanthropy in STEM learning for youngsters in grades preK-12
 - Independent, non-partisan, non-profit voice engaged in public/private partnerships
- Help corporate members strengthen their advocacy, especially at the state and local level
 - Connect with like-minded leaders and create a significantly greater impact than would be possible for individual corporations in isolation
- Ensure accountability for results

First Year Activities

- Snapshot of the STEM investments
- Design Principles for effective philanthropy
 - Mentoring and collaboration
 - Searchable database
 - Characteristics and rubrics
- 100 new sites for handful of effective programs
- State-by-state STEM Vital Signs
- Well-conceived communication strategy

Philanthropy for Many Companies



Refocus With Help of STEM Design Principles



Do Good

Look Good

Feel Good

Featured Programs

- Advanced Placement Training and Incentive
- Career Ladders
- Engineering is Elementary
- FIRST
- K-8 Math Progressions
- National Academy Foundation
- UTeach

Corporate Members

- | | | | |
|-----------------------------------|------------------------------|-----------------------------|------------------------------------|
| 1. A123 Systems | 31. Dell | 61. McKinstry | 91. SpaceX |
| 2. Accenture* | 32. Deloitte | 62. Medtronic | 92. State Farm Insurance |
| 3. Activision Publishing | 33. Dreamworks | 63. Merck | 93. Stellar Solutions |
| 4. The Aerospace Corporation | 34. Discovery Communications | 64. Microsoft | 94. Symantec |
| 5. Agilent Technologies | 35. Dow Chemical | 65. MITRE | 95. Synopsys |
| 6. Alcoa | 36. DuPont | 66. Motorola | 96. Teradata |
| 7. AMD Foundation | 37. Eaton | 67. Nature Publishing Group | 97. Tesla Motors |
| 8. Amgen | 38. E-line Media | 68. The Nielsen Company | 98. Texas Instruments |
| 9. Applied Materials | 39. Eli Lilly and Company | 69. Northrop Grumman | 99. ThermoFisher Scientific |
| 10. Archer Daniels Midland | 40. EMC2 | 70. Ogilvy Public Relations | 100. Time Warner Cable * |
| 11. AT & T | 41. Epic Games | 71. Oracle | 101. United Launch Alliance |
| 12. Aurora Flight Sciences | 42. Ernst & Young | 72. PASCO Scientific | 102. United Space Alliance |
| 13. Autodesk | 43. ExxonMobil * | 73. Prescription Solutions | 103. United Technologies |
| 14. BAE Systems | 44. Facebook | 74. PricewaterhouseCoopers | 104. Univision Communications |
| 15. Ball Aerospace & Technologies | 45. Fluor | 75. Procter & Gamble | 105. Verizon |
| 16. Battelle | 46. Ford Motor | 76. Promethean | 106. Vernier Software & Technology |
| 17. Baxter International | 47. GE | 77. Qualcomm | 107. Viacom |
| 18. Bayer | 48. GlaxoSmithKline | 78. RAND | 108. Virgin Galactic |
| 19. Bechtel | 49. Google | 79. Raytheon | 109. Wireless Generation |
| 20. Boeing | 50. Hitachi, Ltd | 80. Rockwell Collins | 110. Xerox * |
| 21. Cardinal Health | 51. HP | 81. SAS | |
| 22. Carolina Biological | 52. Honeywell | 82. Sally Ride Science * | |
| 23. Caterpillar | 53. IBM | 83. Sambra Energy | |
| 24. Causecast | 54. Intel * | 84. Samsung | |
| 25. Celgene | 55. JP Morgan Chase | 85. Schlumberger Limited | |
| 26. Chevron | 56. Knowledge Universe | 86. Sempra Energy | |
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| 28. Cognizant | 58. LMI Aerospace | 88. SMART Tech | |
| 29. Comcast | 59. Lockheed Martin | 89. Sony Pictures | |
| 30. Corning | 60. McKinsey & Company | 90. Space Systems / Loral | |

*** Founding/Board Member**



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